TP700
A5.

INDEX TO VOLUME LXXXIX.

July 1 to December 31, 1908.

A

Address of President Alexander C. Humphreys, American Gas Institute..... 750
Address of President C. O. G. Miller, Pacific Coast Gas Association..... 537
Address of President D. H. Frazer, Michigan Gas Association..... 620
Address of President H. H. Powell, Canadian Gas Association..... 140
Address of President W. Doig Gibb, Institution of Gas Engineers, Great Britain..... 10
Advertising of a Public Service Corporation, A Few Thoughts on the, by E. St. Elmo Lewis 759
*Alarm, Relief Holder, by R. V. Howes..... 575
American Gas Institute, Bureau of Information, 14, 233, 365, 453, 584, 628, 1112
American Practice of Gas Piping and Gas Lighting in Buildings, The, by "O."..... 486
Ammonia Direct as an Ammonia Salt, Feld's Process of Recovering..... 446
*Ammonia Recovery Plant, Koppers' Improved, Recent Improvements in Connection with Gas Works Installations in Germany, with Special Reference to the Koppers' Patent Inclined Coke Ovens Erected at Bochum Gas Works and to, by A. Peters..... 268
Annual Report, Bureau of Lamps and Lighting, New York City for the Year 1906..... 575
Appliances Used in Gas Consumption, Some, by C. Forbes..... 226
*Arc Electric Lamps, Improvements in Luminous 408
*Architectural Designs with Lamps and Lights, Beautifying, by "R."..... 311
Associate Member, As it Looks to an, by W. M. Blinks..... 804
Autogenous Welding by the Oxy-Acetylene Flame 1111
*Avon Street Gas Works, Bristol, Coal and Coke Handling Plant at the..... 813

B

*Ball Bearings in Gas Fixtures, by "Engineer" 222
Baltimore Retort and Firebrick Company, Redivivus of the..... 497
*Banners, Political, The Illuminating of, by "R." 178
Basford, H. R., Heating, Modern Methods of.. 664
*Beautifying Architectural Designs with Lamps and Lights, by "R."..... 311
*Bender, The Wallace Hand Power..... 893
*Bending, Tools, Hand..... 232
Benzol Enrichment, The Theory of, by E. H. Earnshaw 753
Bigelow, Lucius S., Commercial Side of the Gas Industry, The..... 267
Blinks, W. M., Associate Member, As it Looks to an 804
Board of Gas and Electric Light Commissioners, Commonwealth of Massachusetts, Review of the Twenty-third Annual Report, by H. Thurston Owens..... 52
Boerth Against the Detroit City Gas Company, Circuit Court, Wayne County, Mich., The Case of..... 274
Boilers and Boiler Compounds, by C. N. Chubb. 137
Bond, Charles O., Photometry of Gas, Some Further Remarks on the..... 711
Bookkeeping of a Small Gas Company, by George S. Forest..... 317
Borden, A. W., Delinquent Account, The..... 55
*Bracket, The Jones Pressure Reducing..... 1070
*Bradford, William, Fuels Available in the Iowa District, Comparative Value of..... 139
*Bristol Electric Time Recorder, The..... 850
Britton, John A., Corporation Regulation..... 666
Bureau of Information, American Gas Institute, 14, 233, 365, 453, 584, 628, 1112
Bureau of Lamps and Lighting, New York City, Annual Report for the Year 1906..... 575
Burning Gas, The Hygiene of, by J. C. Grey.... 8
Business Policies, New, by H. C. Hill..... 1068
By-Products and Gas in the United States for the Year 1907, The Production of, by H. Thurston Owens..... 1109
By-Products of the Gas Industry, by John Keilior 184

C

Calorific Power of Petroleum Oils and the Relation of Density to Calorific Power, The.... 625
Canada, W. J., Wiring of a Small City, The.... 143
Canadian Gas Association, First Annual Meeting 139, 184, 225
Canadian Gas Coal, Some Experiences with, by R. A. Wallace..... 228
Carbon in Oil Gas Manufacture, The Story of, by F. C. Millard..... 578
Case of Boerth against the Detroit City Gas Company, Circuit Court, Wayne County, Mich. 274
Ceiling, Metal, Decorating a..... 14
*Cement Bases, Fastening Gas Pipes to, by "R." 849
Central Station Territory, Private Electric Plants in..... 540
Central Station Viewpoint, Industrial Power Business from a, by W. F. Lloyd..... 583
Chubb, C. N., Boilers and Boiler Compounds.. 137
Churches, The Lighting of..... 359
*Coal and Coke Handling Plant at the Avon Street Gas Works, Bristol..... 813
*Coal at Low Temperatures, Destructive Distillation of, by Prof. Alfred H. White and Messrs. Fred. E. Park and Wm. A. Dunkley 621
*Coal Carbonization, Vertical Retorts and Other Systems of, by J. H. Taussig..... 884
*Coal, The Nature of the Volatile Matter of, as Evolved under Different Conditions, by H. C. Porter and F. K. Ovitz..... 447
Coking Coals, A Practical Test for, by Max A. Pisel 445
*Colman, Dr. Harold G., Seals and Pressures in the Hydraulic Main and Retort, The Effect of Practical Working of the..... 401
Commercial Side of the Gas Industry, The, by Lucius S. Bigelow..... 267
*Concrete Chimneys, Tall, by "R."..... 1067
*Concrete Oil Tanks..... 491
*Cornell, N. A., Wiring and Illumination of the Hudson River Tunnels, The..... 672
Concrete Pipes and Poles, Weaving..... 278
Corporation Regulation, by John A. Britton.... 666

CORRESPONDENCE—

Artificial Respiration, as to Experiments in Electric Heat, Some Useful Ways for Applying 761
Special English Correspondence, by Norton H. Humphrys.....145, 365, 541, 717, 937, 1113
Corrosion, Protection of Iron and Steel against, by Painting, by George B. Heckel..... 496
Crawford, Thomas, Consumers, Attention to.. 53
Creighton, E. E. F., Lightning Phenomena.... 276

D

Davis, Wm. E., Gas Manager's Relation to the Public and to the Employees of his Company, A..... 57
December Meeting, New York Section, Illuminating Engineering Society, The..... 1111
Decorating a Metal Ceiling..... 14
Delinquent Account, The, by A. W. Borden..... 55
*Detroit City Gas Works, Office Building of the 310
Detroit City Gas Company, Circuit Court, Wayne County, Mich., The Case of Boerth against the..... 274
*Destructive Distillation of Coal at Low Temperatures, by Prof. Alfred H. White and Messrs. Fred. E. Park and Wm. Dunkley.. 621
*Diagrams, Self-Explanatory..... 101
Dickey, E. S., Meters, The Necessity of Proper Maintenance of..... 47
*Distilling Tar in Medium Sized Gas Works, by John Young..... 669
*Du Bois Suction Gas Producer, The..... 321
Dynamo, Determining the Electro-motive Force of a, without Running it, by W. M. Hollis.. 233

E

Earnshaw, E. H., Benzol Enrichment, The Theory of..... 753

EDITORIALS—

American Gas Institute, Tentative Plan by Committee of Arrangements, New York Meeting 89
American Gas Institute, Third Annual Meeting of the.....663, 705
American Society Mechanical Engineers, First Meeting, Gas Power Section..... 663
British Institution of Gas Engineers, The Sixth Annual General Meeting of the.... 45
Bureau of Information Going on with the Good Work, The..... 1101
Canadian Gas Association, First Annual Meeting 1
Coggshall, Henry F., Retires from Active Business 221
Costly Mistake? Is it a..... 354
Dr. Homer T. Fuller, Alumni Association, Worcester Polytechnic Institute, Respecting the Death of..... 793
Electric Heating..... 881
Ellison, B. Frank, Death of..... 298
Employees of the Westchester Lighting Company, The November Conference of the 969
Exceptionally Good Meeting, An..... 837
Gas Appliance Exhibition, The..... 925
Gas Meter Tests, A Peculiar Way of Reporting 442
German Association of Gas and Water Men, The Meeting of the..... 89
Illuminating Engineering Society, Second Annual Convention..... 133
Illuminating Engineering Society, Special Editorial Correspondence 618
Important Bulletin, An..... 133
"Jingle" Contest, A Successful..... 354
Lesson from Columbus, Ind., A..... 442
Livesey, Sir George, Death of..... 663
McIlhenny, Oliver, Obituary Note..... 881
Michigan Gas Association, Kalamazoo Meeting 575
Mueller Exhibit at the Chicago Show, The.. 1102
National Commercial Gas Association, The Chicago Meeting of the..... 1013
National Commercial Gas Association, The Fourth Meeting of the..... 1057
Northwestern Gas Association, A..... 46
Pacific Coast Gas Association, Sixteenth Annual Convention..... 486
Parkinson, Mr. R. R., Explains..... 177
Pennsylvania Gas Association, The..... 1014
Personals, A Batch of..... 793
Railroad Commission of Wisconsin as Affecting the Lighting Interests, The First Findings of the..... 309
Richardson, Colonel F. S., Disposes of his Lighting Properties..... 925
Special Editorial Correspondence via Brazil, South America..... 2
*Electrical Generating System of the Newton (N. J.) Gas and Electric Company..... 405
Electricity, Attitude of the Law Toward, by Emerson W. Read..... 410
Electricity, Is Supplying, a Natural Monopoly?. 407
*Electric Lamps, Improvements in Luminous Arc 408
Electric Plants, Private, in Central Station Territory 540
Electric Railway Engineering—Why it is Defective by H. W. Spang..... 929
*Electric Time Recorder, The Bristol..... 850
*Electroliers and Gasaliers, by "R."..... 928
Electromotive Force of a Dynamo, Determining the, without Running it, by W. M. Hollis 233
*Engine Failures, Gas.....579, 624
Engine, The Marine Gas..... 101
*Exhibition of Gas Appliances, on Joint Account the National Commercial Gas Association and the American Gas Institute, Chicago 491
Explosive Gas Mixtures, Inflammation Speeds of 445
Eyesight, Illumination and Our..... 409

F

*Failures, Gas Engine.....579, 624
Feld's Process of Recovering Ammonia Direct as an Ammonia Salt..... 446
*Fitting Wagons in Service, Spokane Falls..... 1067
Financial Problems of the Manager, The, by Frank T. Hulswit..... 980
*Fixtures and Illuminants: Street Lighting, by H. Thurston Owens..... 715
*Fixtures, Gas, Ball Bearings in, by "Engineer" 222
Forbes, C., Appliances Used in Gas Consumption, Some..... 226
Forest, George S., Bookkeeping of a Small Gas Company 317
*Foster, Charles E., Influence of Temperature on Gas Production..... 926
Foster, W. H., Humorous Side of a Gas Man's Life, The..... 538
Frazer, D. H., President of the Michigan Gas Association, Address of..... 620
French View of Vertical Retorts, A..... 232
*Fuels Available in the Iowa District, Comparative Value of, by William Bradford..... 139
*Fuel Weight in a Freshly Charged Producer, Loss of, by N. T. Harrington..... 716
Furnaces for Internal Furnace Boilers, The Morison Suspension..... 390

TP700
A5.

INDEX TO VOLUME LXXXIX.

July 1 to December 31, 1908.

A

Address of President Alexander C. Humphreys, American Gas Institute..... 750
Address of President C. O. G. Miller, Pacific Coast Gas Association..... 537
Address of President D. H. Frazer, Michigan Gas Association..... 620
Address of President H. H. Powell, Canadian Gas Association..... 140
Address of President W. Doig Gibb, Institution of Gas Engineers, Great Britain..... 10
Advertising of a Public Service Corporation, A Few Thoughts on the, by E. St. Elmo Lewis 759
*Alarm, Relief Holder, by R. V. Howes..... 575
American Gas Institute, Bureau of Information, 14, 233, 365, 453, 584, 628, 1112
American Practice of Gas Piping and Gas Lighting in Buildings, The, by "O."..... 486
Ammonia Direct as an Ammonia Salt, Feld's Process of Recovering..... 446
*Ammonia Recovery Plant, Koppers' Improved, Recent Improvements in Connection with Gas Works Installations in Germany, with Special Reference to the Koppers' Patent Inclined Coke Ovens Erected at Bochum Gas Works and to, by A. Peters..... 268
Annual Report, Bureau of Lamps and Lighting, New York City for the Year 1906..... 575
Appliances Used in Gas Consumption, Some, by C. Forbes..... 226
*Arc Electric Lamps, Improvements in Luminous 408
*Architectural Designs with Lamps and Lights, Beautifying, by "R."..... 311
Associate Member, As it Looks to an, by W. M. Blinks..... 804
Autogenous Welding by the Oxy-Acetylene Flame 1111
*Avon Street Gas Works, Bristol, Coal and Coke Handling Plant at the..... 813

B

*Ball Bearings in Gas Fixtures, by "Engineer" 222
Baltimore Retort and Firebrick Company, Redivivus of the..... 497
*Banners, Political, The Illuminating of, by "R." 178
Basford, H. R., Heating, Modern Methods of.. 664
*Beautifying Architectural Designs with Lamps and Lights, by "R."..... 311
*Bender, The Wallace Hand Power..... 893
*Bending, Tools, Hand..... 232
Benzol Enrichment, The Theory of, by E. H. Earnshaw 753
Bigelow, Lucius S., Commercial Side of the Gas Industry, The..... 267
Blinks, W. M., Associate Member, As it Looks to an 804
Board of Gas and Electric Light Commissioners, Commonwealth of Massachusetts, Review of the Twenty-third Annual Report, by H. Thurston Owens..... 52
Boerth Against the Detroit City Gas Company, Circuit Court, Wayne County, Mich., The Case of..... 274
Boilers and Boiler Compounds, by C. N. Chubb. 137
Bond, Charles O., Photometry of Gas, Some Further Remarks on the..... 711
Bookkeeping of a Small Gas Company, by George S. Forest..... 317
Borden, A. W., Delinquent Account, The..... 55
*Bracket, The Jones Pressure Reducing..... 1070
*Bradford, William, Fuels Available in the Iowa District, Comparative Value of..... 139
*Bristol Electric Time Recorder, The..... 850
Britton, John A., Corporation Regulation..... 666
Bureau of Information, American Gas Institute, 14, 233, 365, 453, 584, 628, 1112
Bureau of Lamps and Lighting, New York City, Annual Report for the Year 1906..... 575
Burning Gas, The Hygiene of, by J. C. Grey.... 8
Business Policies, New, by H. C. Hill..... 1068
By-Products and Gas in the United States for the Year 1907, The Production of, by H. Thurston Owens..... 1109
By-Products of the Gas Industry, by John Keilior 184

C

Calorific Power of Petroleum Oils and the Relation of Density to Calorific Power, The.... 625
Canada, W. J., Wiring of a Small City, The.... 143
Canadian Gas Association, First Annual Meeting 139, 184, 225
Canadian Gas Coal, Some Experiences with, by R. A. Wallace..... 228
Carbon in Oil Gas Manufacture, The Story of, by F. C. Millard..... 578
Case of Boerth against the Detroit City Gas Company, Circuit Court, Wayne County, Mich. 274
Ceiling, Metal, Decorating a..... 14
*Cement Bases, Fastening Gas Pipes to, by "R." 849
Central Station Territory, Private Electric Plants in..... 540
Central Station Viewpoint, Industrial Power Business from a, by W. F. Lloyd..... 583
Chubb, C. N., Boilers and Boiler Compounds.. 137
Churches, The Lighting of..... 359
*Coal and Coke Handling Plant at the Avon Street Gas Works, Bristol..... 813
*Coal at Low Temperatures, Destructive Distillation of, by Prof. Alfred H. White and Messrs. Fred. E. Park and Wm. A. Dunkley 621
*Coal Carbonization, Vertical Retorts and Other Systems of, by J. H. Taussig..... 884
*Coal, The Nature of the Volatile Matter of, as Evolved under Different Conditions, by H. C. Porter and F. K. Ovitz..... 447
Coking Coals, A Practical Test for, by Max A. Pisel 445
*Colman, Dr. Harold G., Seals and Pressures in the Hydraulic Main and Retort, The Effect of Practical Working of the..... 401
Commercial Side of the Gas Industry, The, by Lucius S. Bigelow..... 267
*Concrete Chimneys, Tall, by "R."..... 1067
*Concrete Oil Tanks..... 491
*Cornell, N. A., Wiring and Illumination of the Hudson River Tunnels, The..... 672
Concrete Pipes and Poles, Weaving..... 278
Corporation Regulation, by John A. Britton.... 666

CORRESPONDENCE—

Artificial Respiration, as to Experiments in Electric Heat, Some Useful Ways for Applying 761
Special English Correspondence, by Norton H. Humphrys.....145, 365, 541, 717, 937, 1113
Corrosion, Protection of Iron and Steel against, by Painting, by George B. Heckel..... 496
Crawford, Thomas, Consumers, Attention to.. 53
Creighton, E. E. F., Lightning Phenomena.... 276

D

Davis, Wm. E., Gas Manager's Relation to the Public and to the Employees of his Company, A..... 57
December Meeting, New York Section, Illuminating Engineering Society, The..... 1111
Decorating a Metal Ceiling..... 14
Delinquent Account, The, by A. W. Borden..... 55
*Detroit City Gas Works, Office Building of the 310
Detroit City Gas Company, Circuit Court, Wayne County, Mich., The Case of Boerth against the..... 274
*Destructive Distillation of Coal at Low Temperatures, by Prof. Alfred H. White and Messrs. Fred. E. Park and Wm. Dunkley.. 621
*Diagrams, Self-Explanatory..... 101
Dickey, E. S., Meters, The Necessity of Proper Maintenance of..... 47
*Distilling Tar in Medium Sized Gas Works, by John Young..... 669
*Du Bois Suction Gas Producer, The..... 321
Dynamo, Determining the Electro-motive Force of a, without Running it, by W. M. Hollis.. 233

E

Earnshaw, E. H., Benzol Enrichment, The Theory of..... 753

EDITORIALS—

American Gas Institute, Tentative Plan by Committee of Arrangements, New York Meeting 89
American Gas Institute, Third Annual Meeting of the.....663, 705
American Society Mechanical Engineers, First Meeting, Gas Power Section..... 663
British Institution of Gas Engineers, The Sixth Annual General Meeting of the.... 45
Bureau of Information Going on with the Good Work, The..... 1101
Canadian Gas Association, First Annual Meeting 1
Coggshall, Henry F., Retires from Active Business 221
Costly Mistake? Is it a..... 354
Dr. Homer T. Fuller, Alumni Association, Worcester Polytechnic Institute, Respecting the Death of..... 793
Electric Heating..... 881
Ellison, B. Frank, Death of..... 298
Employees of the Westchester Lighting Company, The November Conference of the 969
Exceptionally Good Meeting, An..... 837
Gas Appliance Exhibition, The..... 925
Gas Meter Tests, A Peculiar Way of Reporting 442
German Association of Gas and Water Men, The Meeting of the..... 89
Illuminating Engineering Society, Second Annual Convention..... 133
Illuminating Engineering Society, Special Editorial Correspondence 618
Important Bulletin, An..... 133
"Jingle" Contest, A Successful..... 354
Lesson from Columbus, Ind., A..... 442
Livesey, Sir George, Death of..... 663
McIlhenny, Oliver, Obituary Note..... 881
Michigan Gas Association, Kalamazoo Meeting 575
Mueller Exhibit at the Chicago Show, The.. 1102
National Commercial Gas Association, The Chicago Meeting of the..... 1013
National Commercial Gas Association, The Fourth Meeting of the..... 1057
Northwestern Gas Association, A..... 46
Pacific Coast Gas Association, Sixteenth Annual Convention..... 486
Parkinson, Mr. R. R., Explains..... 177
Pennsylvania Gas Association, The..... 1014
Personals, A Batch of..... 793
Railroad Commission of Wisconsin as Affecting the Lighting Interests, The First Findings of the..... 309
Richardson, Colonel F. S., Disposes of his Lighting Properties..... 925
Special Editorial Correspondence via Brazil, South America..... 2
*Electrical Generating System of the Newton (N. J.) Gas and Electric Company..... 405
Electricity, Attitude of the Law Toward, by Emerson W. Read..... 410
Electricity, Is Supplying, a Natural Monopoly?. 407
*Electric Lamps, Improvements in Luminous Arc 408
Electric Plants, Private, in Central Station Territory 540
Electric Railway Engineering—Why it is Defective by H. W. Spang..... 929
*Electric Time Recorder, The Bristol..... 850
*Electroliers and Gasaliers, by "R."..... 928
Electromotive Force of a Dynamo, Determining the, without Running it, by W. M. Hollis 233
*Engine Failures, Gas.....579, 624
Engine, The Marine Gas..... 101
*Exhibition of Gas Appliances, on Joint Account the National Commercial Gas Association and the American Gas Institute, Chicago 491
Explosive Gas Mixtures, Inflammation Speeds of 445
Eyesight, Illumination and Our..... 409

F

*Failures, Gas Engine.....579, 624
Feld's Process of Recovering Ammonia Direct as an Ammonia Salt..... 446
*Fitting Wagons in Service, Spokane Falls..... 1067
Financial Problems of the Manager, The, by Frank T. Hulswit..... 980
*Fixtures and Illuminants: Street Lighting, by H. Thurston Owens..... 715
*Fixtures, Gas, Ball Bearings in, by "Engineer" 222
Forbes, C., Appliances Used in Gas Consumption, Some..... 226
Forest, George S., Bookkeeping of a Small Gas Company 317
*Foster, Charles E., Influence of Temperature on Gas Production..... 926
Foster, W. H., Humorous Side of a Gas Man's Life, The..... 538
Frazer, D. H., President of the Michigan Gas Association, Address of..... 620
French View of Vertical Retorts, A..... 232
*Fuels Available in the Iowa District, Comparative Value of, by William Bradford..... 139
*Fuel Weight in a Freshly Charged Producer, Loss of, by N. T. Harrington..... 716
Furnaces for Internal Furnace Boilers, The Morison Suspension..... 390

INDEX TO VOL. LXXXIX.

C

*Gasaliers and Electroliers, by "R."..... 928
Gas and By-Products in the United States for the Year 1907, The Production of, by H. Thurston Owens..... 1109
Gas and Electric Light Commissioners, Commonwealth of Massachusetts, Review of the Twenty-third Annual Report of the Board of, by H. Thurston Owens..... 52
*Gas Appliances, Exhibition of, on Joint Account the National Commercial Gas Association and the American Gas Institute, Chicago 491
Gas Company and the Public, The, by E. M. Walker 1069
*Gas Cookers and Gas Fires, The Wayte Safety Trap for..... 491
*Gas Engine Failures.....579, 624
*Gas Engine, The Improved Turner-Fricke.... 357
Gas Engine, The Marine..... 101
Gasfitters, Technical Training for..... 144
*Gas Fixtures, Ball Bearings in, by "Engineer" 222
Gas for Power Purposes, Producer, by E. J. Philip 229
*Gas Furnace for Melting Soft Metals..... 579
*Gas Illumination, Better, by T. S. Litle, Jr.... 794
Gas, Instantaneous Water Heaters for..... 893
Gas Manager's Relation to the Public and to the Employees of his Company, A, by Wm. E. Davis..... 57
Gas Mixtures, Explosive, Inflammation Speeds of 445
*Gas Pipe, Modern Wrought, by F. N. Speller.. 971
*Gas Pipes, Fastening to Cement Bases, by "R." 849
Gas Piping and Gas Lighting in Buildings, The American Practice of, by "O."..... 486
*Gas Producer, The Du Bois Suction..... 321
*Gas Production, Influence of Temperature on, by Charles E. Foster..... 926
Gas Reactions and their Industrial Application, by Thomas Holgate..... 493
Gas Securities, The Market for.....16, 60, 104, 148, 192, 236, 280, 324, 368, 412, 456, 500, 544, 588, 632, 676, 719, 764, 808, 852, 896, 940, 984, 1028, 1072, 1116
Gas Service in Wisconsin, Rules and Standards Regarding, as Formulated by the Railroad Commission of that State..... 400
*Gas Shop Talks: Removing Refractory Keys, by "R."..... 664
*Gas, Sign Lighting by..... 53
*Generating System, Electrical, of the Newton (N. J.) Gas and Electric Company..... 405
*Generator of Water Gas Apparatus, Method of Regulating Steam for, by R. V. Howes.. 536
Gibb, W. Doig, President Institution of Gas Engineers, Great Britain, Address of..... 10
Grey, J. C., Hygiene of Burning Gas, The..... 8

H

Hall, E. L., Purification Problems..... 539
*Hand Bending Tools..... 232
*Hand Power Bender, The Wallace..... 893
*Harbor Lights, by "R."..... 441
*Harrington, N. T., Fuel Weight in a Freshly Charged Producer, Loss of..... 716
Heating, Modern Methods of, by H. R. Basford 664
Heckel, George B., Corrosion, Protection of Iron and Steel against, by Painting..... 496
*High Pressure Gas Distribution, by Jacob D. Von Maur.....1058, 1102
*High Pressure System of the Los Angeles Gas and Electric Company, The, by C. A. Luckenbach 576
Hill, H. C., New Business Policies..... 1068
*Holder Cups and Tank Heating, by C. J. Ramsburg 707
*Holes in Pipes, Chats on Making, by "Engineer" 399
Holgate, Thomas, Gas Reactions and their Industrial Application..... 493
Hollis, W. M., Determining the Electromotive Force of a Dynamo without Running it..... 233
*Horne Thermostatic Device, The..... 716
*Howes, R. V., Regulating Steam for Generator of Water Gas Apparatus, Method of..... 536
*Howes, R. V., Relief Holder Alarm..... 575
*Hudson River Tunnels, The Wiring and Illumination of the, by N. A. Cornell..... 672
Hulswit, Frank T., Financial Problems of the Manager, The..... 960
Humorous Side of a Gas Man's Life, The, by W. H. Foster..... 538
Humphreys, Alexander C., President of the American Gas Institute, Address of..... 750
Humphrys, Norton H., Special English Correspondence.....145, 365, 541, 717, 937, 1113
*Hyde, Dr. E. P., Photometrical Laboratories, Some Well Known..... 487
Hygiene of Burning Gas, The, by J. C. Grey.... 8

I

Illuminating Engineering Society, The, December Meeting, New York Section..... 1111
*Illuminating of Political Banners, The, by "R." 178
Illumination and our Eyesight..... 409
*Improved Turner-Frick Gas Engine, The..... 357
*Improved Water Gas Apparatus, The Sutherland 189
Industrial Power Business from a Central Station Viewpoint, by W. F. Lloyd..... 583
Inflammation Speeds of Explosive Gas Mixtures. 445
Information Bureau, American Gas Institute, 14, 233, 365, 453, 584, 628, 1112
Instantaneous Water Heaters for Gas..... 893
*Integrating Photometers, by Dr. Hugo Kruss.. 404
Internal Furnace Boilers, The Morison Suspension Furnaces, for..... 360
Iowa District Gas Association, Fourth Annual Meeting.....98, 134, 179, 223, 316, 354, 530
Iron and Steel, Protection of, against Corrosion, by Painting, by George B. Heckel..... 496
Items of Interest from Various Localities, 14, 58, 102, 146, 190, 234, 278, 322, 366, 410, 454, 498, 542, 586, 630, 674, 718, 762, 806, 850, 894, 938, 982, 1026, 1070, 1114.

J

*Jones Pressure Reducing Bracket, The..... 1070

K

Keillor, John, By-Products of the Gas Industry 184
*Keys, Removing Refractory: Gas Shop Talks, by "R."..... 664
*Koppers' Patent Inclined Coke Ovens Erected at Bochum Gas Works and to Koppers' Improved Ammonia Recovery Plant, Recent Improvements in Connection with Gas Works Installations in Germany, with Special Reference to the, by A. Peters..... 268
*Krüss, Dr. Hugo, Integrating Photometers..... 404

L

*Laboratories, Photometrical, Some Well-Known, by Dr. E. P. Hyde..... 487
*Labor Costs for Main Laying, Some Examples in, by William H. Matlack..... 1016
*Labor Saving in Medium Sized Gas Plants, by F. G. Remington..... 847
*Lackawanna Steel Sheet Piling..... 407
*Lamp Fallacies, Tungsten, by H. Thurston Owens 90
Lamps and Lighting, New York City, for the Year 1906, Annual Report, Bureau of..... 575
*Lamps and Lights, Beautifying Architectural Designs with, by "R."..... 311
Law Toward Electricity, Attitude of the, by Emerson W. Read..... 410
Lewis, E. St. Elmo, Advertising of a Public Service Corporation, A Few Thoughts on the 759
Lighting of Churches, The..... 359
Lightning Phenomena, by E. E. F. Creighton.... 276
*Lighting, Street, The Value of, by H. Thurston Owens 882
*Light Shades, Modern, by "R."..... 619
*Lights, Harbor, by "R."..... 444
*Light-Tinker, The, by "R."..... 970
*Litle, T. S., Jr., Better Gas Illumination..... 794
Livesey, George Thomas, Obituary..... 1014
Lloyd, W. F., Industrial Power Business from a Central Station Viewpoint..... 583
*Luckenbach, C. A., High Pressure System of the Los Angeles Gas and Electric Company, The 576
*Luminous Arc Electric Lamps, Improvements in 408

M

*Machinery, Securing to the Floor, by "R."..... 142
*Mains Under Pressure, A New System of Tapping, by "J. T. T."..... 231
Manager, Financial Problems of the, by Frank T. Hulswit 980
Manager, The Responsibilities of the, by Richard Schaddelee 1026
Marine Gas Engine, The..... 101
Market for Gas Securities, The.....16, 60, 104, 148, 192, 236, 280, 324, 368, 412, 456, 500, 544, 588, 632, 676, 719, 764, 808, 852, 896, 940, 984, 1028, 1072, 1116
*Matlack, William H., Labor Costs for Main Laying, Some Examples in..... 1016
*Melting Soft Metals, Gas Furnace for..... 579
Metal Ceiling, Decorating a..... 14
Meters, The Necessity of Proper Maintenance of, by E. S. Dickey..... 47
Michigan Gas Association, Seventeenth Annual Meeting 803, 845, 891
Millard, F. C., Carbon in Oil Gas Manufacture, The Story of..... 578
Miller, C. O. G., President of the Pacific Coast Gas Association, Address of..... 537
*Modern Light Shades, by "R."..... 619
Morison Suspension Furnaces for Internal Furnace Boilers, The..... 360
*Multiple Reflecting Show Window Devices, by "R." 1109

N

*National Commercial Gas Association and the American Gas Institute, Chicago, Exhibition of Gas Appliances, on Joint Account, the... 491
Natural Monopoly, Is Supplying Electricity, a?. 407
New Business Policies, by H. C. Hill..... 1068
*Newton (N. J.) Gas and Electric Company, Electrical Generating System of the..... 405
New York Section, Illuminating Engineering Society, The December Meeting..... 1111

NOTICES, OFFICIAL—

American Gas Institute.....45, 89, 133, 177, 221, 265, 309, 353, 398, 442, 529, 573, 617, 661
Commercial Gas Association..... 969
Empire State Gas and Electric Association, 398, 442, 485, 575
Indiana Gas Association..... 530
Michigan Gas Association.....353, 398, 441, 486
Pacific Coast Gas Association..... 397

O

Obituary, George Thomas Livesey..... 1014
*Office Building of the Detroit City Gas Works. 310
Oils, The Calorific Power of Petroleum and the Relation of Density to Calorific Power..... 625
*Oil Tanks, Concrete..... 491
*Old Buildings, The Wiring of..... 581
*Ovitz, F. K., and H. C. Porter, Coal, The Nature of the Volatile Matter of, as Evolved under Different Conditions..... 447
Owens, H. Thurston, Gas and By-Products in the United States for the Year 1907, The Production of..... 1109
Owens, H. Thurston, Review of the Twenty-third Annual Report, Board of Gas and Electric Light Commissioners, Commonwealth of Massachusetts 52
*Owens, H. Thurston, Street Lighting: Fixtures and Illuminants..... 715
*Owens, H. Thurston, Street Lighting, The Value of..... 882
*Owens, H. Thurston, Tungsten Lamp Fallacies 90
Oxy-Acetylene Flame, Autogenous Welding by the 1111

P

Pacific Coast Gas Association, Sixteenth Annual Meeting 800, 842
Pearson, W. H., Jr., Producer Gas Fired Retort Benches 226
*Pennsylvania Railroad Terminal, The; Maintaining Sewer and Water Pipes in Connection therewith, by "O."..... 46
*Peters, A., Recent Improvements in Connection with Gas Works Installations in Germany, with Special Reference to the Koppers' Patent Inclined Coke Ovens Erected at Bochum Gas Works and to Koppers' Improved Ammonia Recovery Plant..... 268
Petroleum Oils, The Calorific Power of, and the Relation of Density to Calorific Power..... 625
Philip, E. J., Producer Gas for Power Purposes 229
*Photometers, Integrating, by Dr. Hugo Krüss. 404
*Photometrical Laboratories, Some Well-Known, by Dr. E. P. Hyde..... 487
Photometry of Gas, Some Further Remarks on the, by Charles O. Bond..... 711
*Piling, Lackawanna Steel Sheet..... 407
Pipes and Poles, Weaving Concrete..... 278
*Pipes, Chats on Making Holes in, by "Engineer" 399
*Pipes, Gas, Fastening to Cement Bases, by "R." 849
Pisel, Max A., Practical Test for Coking Coals, A 445
*Pittsburg Portable Radiator, The..... 312
*Plant at the Avon Street Gas Works, Bristol, Coal and Coke Handling..... 313
*Pneumatic Tube Service of the Post Office Department, by "O."..... 266
*Political Banners, The Illuminating of, by "R." 178
*Porter, H. C., and F. K. Ovitz, Coal, The Nature of the Volatile Matter of, as Evolved under Different Conditions..... 447
Powell, H. H., President of the Canadian Gas Association, Address of..... 140
*Power Drip Pump Wagon, A..... 1016
*Presentation and an Unveiling, A..... 443
*Pressure Reducing Bracket, The Jones..... 1070
*Pressures and Seals in the Hydraulic Main and Retort, The Effect of Practical Working of the, by Dr. Harold G. Colman..... 401
*Pressure, A New System of Tapping Mains Under, by "J. T. T."..... 231
Private Electric Plants in Central Station Territory 540
*Producer, Loss of Fuel Weight in a Freshly Charged, by N. T. Harrington..... 716
Properties of Superheated Steam, The Thermal. 144
Public and the Gas Company, The, by E. M. Walker 1069
Public Service Lighting Companies, Standards Adopted by the Railroad Commission of Wisconsin, Anent..... 267
Purification Problems, by E. L. Hall..... 539

R

*Radiator, The Pittsburgh Portable..... 312
Railroad Commission of Wisconsin, Anent Public Service Lighting Companies, Standards Adopted by the..... 267
Railway Engineering, Electric—Why it is Defective, by H. W. Spang..... 929
*Ramsburg, C. J., Holder Cups and Tank Heating 707
Read, Emerson W., Electricity, Attitude of the Law Toward..... 410
Recovering Ammonia Direct as an Ammonia Salt, Feld's Process of..... 446
Redivivus of the Baltimore Retort and Firebrick Company..... 497
*Refractory Keys, Removing: Gas Shop Talks, by "R."..... 664
*Relief Holder Alarm, by R. V. Howes..... 575
*Remington, F. G., Labor Saving in Medium Sized Gas Plants..... 847
Responsibilities of the Manager, The, by Richard Schaddelee 1026
Retort Benches, Producer Gas Fired, by W. H. Pearson, Jr..... 226
Retort Coke, Process, Savings from the: A Computation for 1907..... 627
Retorts, Vertical, A French View of..... 232
Rules and Standards Regarding Gas Service in Wisconsin, as Formulated by the Railroad Commission of that State..... 400

S

*Safety Trap for Gas Cookers and Gas Fires, The Wayte..... 491
Savings from the Retort Coke Process: A Computation for 1907..... 627
Schaddelee, Richard, Responsibilities of the Manager 1026

INDEX TO VOL. LXXXIX.

*Seals and Pressures in the Hydraulic Main and Retort, The Effect of Practical Working of the, by Dr. Harold G. Colman..... 401
*Securing Machinery to the Floor, by "R."..... 142
Securities, Gas, The Market for.....16, 60, 104, 148, 192, 236, 280, 324, 368, 412, 456, 500, 544, 588, 632, 676, 719, 764, 808, 852, 896, 940, 984, 1028, 1072, 1116
*Self-Explanatory Diagrams..... 161
*Service of the Post Office Department, Pneumatic Tube, by "O."..... 266
*Show Window Devices, Multiple-Reflecting, by "R."..... 1109
*Sign Lighting by Gas..... 53
*Soft Metals, Gas Furnace for Melting..... 579
Spang, H. W. Electric Railway Engineering—Why it is Defective..... 929
*Speller, F. N., Modern Wrought Gas Pipe..... 971
*Spokane Falls Fitting Wagons in Service..... 1067
Standards Adopted by the Railroad Commission of Wisconsin, Anent Public Service Lighting Companies..... 267
Standards and Rules Regarding Gas Service in Wisconsin, as Formulated by the Railroad Commission of that State..... 400
*Steam for Generator of Water Gas Apparatus, Method of Regulating, by R. V. Howes..... 536
*Steel Sheet Piling, Lackawanna..... 407
*Street Lighting: Fixtures and Illuminants, by H. Thurston Owens..... 715
Street Lighting Statistics in New York City for the Year 1908..... 3
*Street Lighting, The Value of, by H. Thurston Owens..... 882
*Suction Gas Producer, The Du Bois..... 321
Superheated Steam, The Thermal Properties of. 144
*Sutherland Improved Water Gas Apparatus, The..... 189

T

*Tall Concrete Chimneys, by "R."..... 1067
*Tapping Mains Under Pressure, A New System of, by "J. T. T."..... 231
*Tar Distilling in Medium Sized Gas Works, by John Young..... 669
*Taussig, J. H., Vertical Retorts and Other Systems of Coal Carbonization..... 884
*Taylor, W. H., Jr., Tar Disposal, Three Methods of..... 54
Technical Training for Gasfitters..... 144
*Temperature, Influence of, on Gas Production, by Charles E. Foster..... 926
Test for Coking Coals, A Practical, by Max A. Pisel..... 445
Thermal Properties of Superheated Steam, The. 144
*Thermostatic Device, The Horne..... 716
*Time Recorder, The Bristol Electric..... 850
*Tools, Hand Bending..... 232
*Tube Service of the Post Office Department, Pneumatic, by "O."..... 266
*Tungsten Lamp Fallacies, by H. Thurston Owens..... 90
*Turner-Fricke Gas Engine, The Improved..... 357

U

*Unveiling and a Presentation, An..... 443

V

Vertical Retorts, A French View of..... 232
*Von Maur, Jacob D., High Pressure Gas Distribution.....1058, 1102

W

Walker, E. M., Gas Company and the Public, The..... 1069
*Wallace Hand Power Bender, The..... 893
Wallace, R. A., Canadian Gas Coal, Some Experiences with..... 228
*Water, Gas Apparatus, The Sutherland Improved..... 189
Water Heaters for Gas, Instantaneous..... 893
*Wayte Safety Trap for Gas Cookers and Gas Fires, The..... 491
Weaving Concrete Pipes and Poles..... 278
Welding by the Oxy-Acetylene Flame, Autogenous..... 1111
*Wiring and Illumination of the Hudson River Tunnels, The, by N. A. Cornell..... 672
Wiring of a Small City, The, by W. J. Canada.. 143
*Wiring of Old Buildings, The..... 5
Wisconsin Gas Association, Seventh Annual Meeting..... 4, 47
*Wrinkles, Some New, by E. H. Yorke.....

Y

*Yorke, E. H., Wrinkles, Some New..... 929
*Young, John, Tar Distilling in Medium Sized Gas Works..... 669

SPECIAL INDEX OF REPORTS OF PROCEEDINGS OF ASSOCIATIONS.

American Gas Institute—Third Annual Meeting.

Address of the President..... 750
Members in Attendance..... 890
Sub-Committee of the Technical Committee on Result of Joint Conference on Unit of Light, Report of..... 933
*Sub-Committee on Calorimetry, Report of....973, 1017

*Wrinkle Department—

Ammonia Liquor, Method of Handling to Storage Tank..... 839
Automatic Alarm on Works' Pressure Gauge..... 756
Automatic Control of Steam Siphon, Apparatus for..... 759
Automatic Water Overflow from Washbox.. 755
Brick Tanks or Wells, Method of Constructing..... 755
Canvas Meter Sling..... 798
Converting a Holder into a Purifying Box... 739
Credit Dial Gauges..... 840
Curves for the Flow of Gas..... 840
Dehydration of Blast Air..... 841
Distance Street Pressure Regulations..... 838
Drip for High Pressure Main..... 755
Dust Proof Gas Light..... 798
Exhauster Blades Sticking, To Prevent..... 758
Gauge Station Box..... 758
Head Gauges, Proving..... 840
Hot Coke Car..... 839
Meter Dial Chamber Test..... 798
Meter Shop Daily Stock Record, Handy Method of Keeping..... 757
Naphthaline Deposits, Method of Removing from Coal Gas System..... 797
Piping Compressed Air to Front of Benches, Plan for..... 842
Purifying Boxes, Emptying with Wheelbarrows..... 799
Record Indicator for Purifying Boxes, A..... 758
Recording Pressure Gauge..... 797
Repairing Cement Joints on a High Pressure Main without Reducing the Pressure, Method of..... 842
Revivification and Handling of Purifying Material..... 797
Rigid Meter Connections, Manifold for..... 799
Scrubber Sprays..... 756
Spray for Dampening Iron Sponge..... 839
Superheater for Decarbonizing..... 839
Steam Nozzle Under Water Gas Generator... 756
Tee, A Special..... 840
Testing Drips, Gauge Apparatus for..... 797
Testing Lime, Method for..... 758
Threading Pipe, Method of..... 757
Water Lute Seals of Purifying Boxes, Increasing..... 798

Papers Read—

Benzol Enrichment, The Theory of, by E. H. Earnshaw..... 753
*Gas Illumination, Better, by T. S. Litle, Jr. 794
*High Pressure Gas Distribution, by Jacob D. Von Maur.....1058, 1102
*Holder Cups and Tank Heating, by C. J. Ramsburg..... 707
*Modern Wrought Gas Pipe, by F. N. Speller 971
Photometry of Gas, Some Further Remarks on the, by Charles O. Bond..... 711
*Vertical Retorts and Other Systems of Coal Carbonization, by J. H. Taussig..... 884

Canadian Gas Association—First Annual Meeting.

Address of President..... 146
Constitution and By-Laws, The..... 142
Cunningham, Thomas J., Speech of..... 231
Entertainment, Outlining the..... 142
Hay, J. C., in the Chair..... 231
Hay, J. C., Speeches of.....141, 230
Next Place of Meeting..... 231
Nominations, Report of Committee on..... 139
Officers, Election of..... 146
Regret, Letter of..... 225
Thanks, Votes of..... 231

Papers Read—

Appliances Used in Gas Consumption, Some by C. Forbes..... 226
By-Products of the Gas Industry, by John Keilior..... 184
Canadian Gas Coal, Some Experiences with, by R. A. Wallace..... 228
Commercial Side of the Gas Industry, The, by Lucius S. Bigelow..... 267
Producer Gas Fired Retort Benches, by W. H. Pearson, Jr..... 226
Producer Gas for Power Purposes, by E. J. Philip..... 229

Iowa District Gas Association Fourth Annual Meeting.

Affiliation Representative..... 536
Affiliation Representative, Appointment of Committee on..... 179
Affiliation Representative, Response of Mr. Haines on Election as..... 536
American Gas Institute, Affiliation with the.... 135
Council, Report of the..... 100
Final Resolutions, Report of Committee on..... 536
General Discussion, Subjects for..... 533
Honorary Membership, Elected to..... 100
Information Bureau, As to the..... 532
Members, New, Election of..... 100
National Commercial Gas Association to Come West, The..... 316
Officers, Election of..... 136
Nominating Committee, Report of..... 136
President's Address, Report of Committee on.... 316
Resolutions, Appointment of Committee on..... 136
Roll Call..... 99
*Secretary and Treasurer, Reports of..... 134
Standardization of Fittings, Report of Committee on..... 135
Telegram, A..... 135
Welcomed to the City..... 98
Welcome, Reply of Mr. McLean to..... 99

*Wrinkle Department—

Cooking School, To Get a Crowd to Attend.. 531
Cotter Bar Screws, Square Heads for..... 532
Decarbonizing Retorts..... 531
Gas Arcs in Dust-Proof Jewelers' Window, Installation of..... 530
Lead Wool, Use of..... 531
Meter Number, Easy Attachment of..... 531
Temperature of Water in Steel Tanks..... 532

Papers Read—

Boilers and Boiler Compounds, by C. N. Chubb..... 137
Bookkeeping of a Small Gas Company, by George S. Forest..... 317
Consumers, Attention to, by Thomas Crawford..... 53
Delinquent Account, The, by A. W. Borden.. 55
*Fuels Available in the Iowa District, Comparative Value of, by William Bradford. 139
Gas Manager's Relation to the Public and to the Employees of his Company, A, by Wm. E. Davis..... 57
Hygiene of Burning Gas, The, by J. C. Grey..... 8
*Tar Disposal, Three Methods of, by W. H. Taylor, Jr..... 54

Michigan Gas Association—Seventeenth Annual Meeting.

Address of President..... 620
Announcement, An..... 803
Welcome, Words of..... 803

Papers Read—

Advertising of a Public Service Corporation, A Few Thoughts on the, by E. St. Elmo Lewis..... 759
Associate Member, As it Looks to an, by W. M. Blinks..... 804
*Destructive Distillation of Coal at Low Temperatures, by Prof. Alfred H. White and Messrs. Fred E. Park and Wm. A. Dunkley..... 621
*Labor Saving in Medium Sized Gas Plants, by F. G. Remington..... 847

Pacific Coast Gas Association Sixteenth Annual Meeting.

Address of President..... 537
Address of President, Appointment of Committee on..... 801
Address of President, Report of Committee on. 842
Colquhoun, George S., Telegram to..... 843
Communications, Reading Some..... 800
Directors, Report of Board of..... 800
Lampblack Briquettes..... 803
Librarian, Report of..... 800
Members in Attendance..... 932
Members, New, Election of..... 800
Nominating Committee, Appointment of..... 800
Nominating Committee, Report of..... 843
Officers, Election of..... 843
Special Committees, Reports of..... 800

Experience Department—

Changing Location of a 12-Inch Main and Drip Pot in a Limited Time..... 668
Drying Carbon Fuel Brick Quickly..... 669
Electrolysis of Underground Pipes, The Prevention of..... 668
Electrolysis the Toreador of the Gas Main.. 667
Gas Regulator that didn't Regulate, The.... 668
Puncture Caused by a Steam Road Roller, A..... 669
Sudden Expansion: What Caused it?..... 668
What Salt Water Did to our Pump..... 668

*Wrinkle Department—

Changing and Repairing Meters Systematically..... 930
Fan Motors, Use of..... 931
Grate Bars..... 931
Piping Apartment Houses for Convenience of Tenants..... 931
Piping Scheme, A..... 931
Practical Demonstrations..... 932
Purifier Boxes, Quick and Effective Means of Filling..... 931
Stack Valve..... 932
Steam Siphon, Automatic..... 932

Papers Read—

Carbon in Oil Gas Manufacture, The Story of, by F. C. Millard..... 578
Corporation Regulation, by John A. Britton.. 666
Heating, Modern Methods of, by H. R. Basford..... 664
*High Pressure System of the Los Angeles Gas and Electric Company, The, by C. A. Luckenbach..... 576
Humorous Side of a Gas Man's Life, The, by W. H. Foster..... 538
Purification Problems, by E. L. Hall..... 539

Wisconsin Gas Association Seventh Annual Meeting.

(Continued from Vol. LXXXVIII.)

Apology, An..... 51
Badge Matter, The..... 98
Beggs, John I., Speech of, at the Banquet..... 5
Doherty, Henry L., Speech of, on State Regulation of Lighting Enterprises..... 92
Meyer, Prof. B. H., Speech of, at the Banquet.. 4
National Commercial Gas Association, A Resolution in Connection with the..... 51
Next Place of Meeting, Report of Committee on..... 51
Nominating Committee, Report of..... 51
Officers, Complimenting the..... 98
Officers, Election of..... 51

Papers Read—

Meters, The Necessity of Proper Maintenance of, by E. S. Dickey..... 47